

REMARKS

Following entry of the above amendment, claims 1-28 will be pending. Claim 1 has been amended clarify the invention is network medium interface card for coupling a device to a network medium. For consistency, claims 2-11 have been amended to refer to the card without change in scope. Claim 3 has also been amended to remove a typographical error, i.e., a second period in line 2. In addition to the above amendments, claim 6 has been amended to correct two occurrences of the term "sub" with the term "block," without change in scope. Additionally, claim 11 has been amended to clarify the connecting of the "ends of the first block" without change in scope. Claims 22-28 have been added.

I. DRAWINGS

Figures 3, 5 and 9 have been amended to be consistent with the original drawings filed and to correct an obvious omission of an arrowhead, as described above. No new matter has been added.

II. REJECTION OF CLAIMS UNDER 35 U.S.C. § 102

Lidinsky

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Lidinsky et al., U.S. Patent No. 4,897,874 ("Lidinsky"). Withdrawal of the rejection is respectfully requested for at least the following reasons.

Lidinsky discloses a high-capacity metropolitan area network (MAN) that includes a hub 1 as a switching center linked to a number of network interface modules (NIMs) 2 at the edge of the network. Col. 6, lines 3-8; Fig. 2. The NIMs 2 provide an interface for connecting multiple end user systems 26, such as workstations 4, mainframes 5, and file servers 6, to the MAN. Col. 6, lines 21-55. The NIMs 2 may also be used to connect the MAN to a local area network 7. The NIMs 2 are linked to the hub 1 via external links (optical fibers) 3. Col. 6, lines 15-20. Lidinsky does not disclose the MAN being on or a part of a network medium interface card. To the

contrary, the MAN itself is a network, and the external links are disclosed in Lidinsky as having an intended length "on the order of 10s of kilometers," Col. 10, lines 20-22.

Claim 1 as amended recites a network medium interface card that includes an external interface for coupling to a network medium, and a switchable connection for selectively internally connecting either two blocks to each other, or one of the blocks to a portion of the external interface. Lidinsky does not teach or suggest the recited network medium interface card. Lidinsky's MAN is not a network medium interface card, but rather is a network designed to cover an entire metropolitan area. Nor would it be even close to practicable to place Lidinsky's MAN on a card. Lidinsky's MAN and the network interface card recited in claim 1 as amended are simply two very different animals. Since Lidinsky does not teach or suggest the network medium interface card of claim 1 as amended, claim 1 is patentable over Lidinsky.

Hutchison

Claims 1, 4-7, 10-16 and 18-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hutchison et al., U.S. Patent No. 5,838,989 ("Hutchison"). Withdrawal of the rejection is respectfully requested for at least the following reasons.

Hutchison discloses various switchable interfaces for coupling a network station to a network having a variety of communication media. In one prior art embodiment disclosed by Hutchison, an interface includes connectors 50 and 52, and respective media attachment units (MAUs) 58 and 54 for connecting to different types of network media. Col. 5, line 57 - col. 6, line 1; Fig. 3. The connector/MAU combinations are coupled to a switch 56. Col. 6, lines 1-5. The switch 56 is used to select which connector/MAU combination is utilized. Col. 6, lines 5-29. In this embodiment, Hutchison does not disclose use of the switch 56 for connecting the two connector/MAU combinations to each other.

In another embodiment, Hutchison discloses a single interface connector that includes interface chips 92 and 94. Col. 10, lines 55-56; Fig. 6. The chips 92 and 94 are coupled to a selector switch 96, which in turn is coupled to a serial interface adaptor IC 98. Col. 11, lines 4-18. The function of selector switch 96 is to select one set of signals, either those connected to the interface chip 92 or those connected to the interface chip 94. Col. 11, lines 9-12. Hutchison does not disclose using the selector switch 96 to connect the interface chips 92 and 94 to each other.

Serial No. 09/595,039
Attorney Docket No. E0902
Firm Reference No. AMDSP0379US

Reply to Office Action Dated January 28, 2004
Reply Dated February 25, 2004

Claim 1 as amended recites a network medium interface card that includes, *inter alia*, first and second blocks, and a switchable connection that may be selectively configured to internally connect the blocks to each other. Hutchison does not teach or suggest a switchable connection that may be selectively configured to internally connect a pair of blocks to each other. As discussed above, Hutchison's switch 56 selects between either one or the other connector/MAU combination, and does not alternatively connect the connector/MAU combinations to each other. Similarly, Hutchison's switch 96 is used to select one set of signals, either those associated with the interface chip 92 or those associated with the interface chip 94. Hutchison's switch 96 does not internally connect the interface chips 92 and 94 to each other, and nothing in Hutchison suggests such a connection. The portions of Hutchison cited for teaching the recited switchable connection refers only to an either/or connection of one or the other of a pair of alternatives (either the connector/MAU combinations or the interface chips), not to connecting the alternatives to each other. Since Hutchison does not teach or suggest all of the limitations of claim 1 as amended, claims 1, 4-7, 10-16, and 18-21 are patentable over Hutchison.

In addition, some of the dependent claims recite additional features not taught or suggested by Hutchison. Claims 4 and 10 recite that one of the blocks includes a physical layer device (PHY), and claims 5 and 7 recite that one of the blocks includes a media access controller (MAC). While Hutchison does disclose PHYs and MACs, Hutchison does not teach or suggest that PHYs and MACs are parts of the alternative connector/MAU combinations selected by the switch 56. Hutchison, at least in the portions relied upon in the Action, does not teach or suggest the second switchable connection recited in claim 6. The embodiments of Hutchison relied upon each involve a single switch, in contrast to the multi-switch configurations disclosed in the present application, see, e.g., the embodiment of Fig. 3, which has switchable connections 56, 76, 82, and 86. Therefore for additional reasons, claims 4-7, 10, and 11 are patentable over Hutchison.

Claim 12 recites a method of testing operation of an internal block of a network medium interface device, the method including, *inter alia*, reconfiguring the interface device such that a normally-internally-connected connection of the block is connected to an external interface. First of all, the portions of Hutchison relied upon make no mention of testing operation, e.g.,

Serial No. 09/595,039
Attorney Docket No. E0902
Firm Reference No. AMDSP0379US

Reply to Office Action Dated January 28, 2004
Reply Dated February 25, 2004

performance, of an internal block of a device. Further, Hutchison does not teach or suggest reconfiguring the interface such that a normally-internally-connected connection of the block is connected to an external interface. Instead, Hutchison discloses using a switch to select one connector/MAU combination or one interface chip. Nothing in the portions of Hutchison relied upon teaches or suggests the recited reconfiguring so as to make such that a normally-internally-connected connection of the block is connected to an external interface. Since Hutchison does not teach or suggest all of the recited features of claim 12, claims 12-16 and 18-21 are patentable over Hutchison.

III. REJECTION OF CLAIMS UNDER 35 USC §103(a)

Combination of Hutchison and Jeng

Claims 2-3, 8-9 and 17 stand rejected under 35 U.S.C. § 103(a) as obvious over Hutchison in view of Jeng, U.S. Patent No. 5,892,768 ("Jeng"). Withdrawal of the rejection is respectfully requested for at least the following reasons.

Jeng does not make up for the failure of Hutchison to teach or suggest all of the recited features of claims 1 and 12. Therefore claims 2, 3, 8, 9, and 17 are patentable over Hutchison and Jeng, either alone or in combination.

IV. NEW CLAIMS

Newly added claim 22 recites a network medium interface device including a media access controller (MAC), a physical layer device (PHY), an external interface; and a switchable connection, wherein the switchable connection may be selectively configured either to internally connect the MAC to the PHY, or to connect either the MAC or the PHY to a transmit portion and/or a receive portion of the external interface. Neither Lidinsky nor Hutchison teach or suggest all the recited features of the network medium interface device of claim 22. Jeng does not make up for the failure of Lidinsky or Hutchison to teach or suggest all of the recited features of claim 22. Therefore, claim 22 and the claims that depend therefrom are patentable over Lidinsky and Hutchison alone or in combination with Jeng.

Serial No. 09/595,039
Attorney Docket No. E0902
Firm Reference No. AMDSP0379US


Reply to Office Action Dated January 28, 2004
Reply Dated February 25, 2004

V. CONCLUSION

In light of the foregoing, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present invention.

A check for \$126 accompanies this Reply to cover the fee for additional claims identified on the attached Fee for Additional Claims Transmittal. Any additional fee(s) resulting from this communication is hereby authorized to be charged to our Deposit Account No. 18-0988; Our Order No. E0902 (AMDSP0379US).

Respectfully submitted,
RENNER, OTTO, BOISSELLE & SKLAR, LLP


Andrew Romero, Reg. No. 43,890

1621 Euclid Avenue, 19th Floor
Cleveland, Ohio 44115-2191
Telephone: (216) 621-1113
Facsimile: (216) 621-6165

R:\ARomero\Cases\AMDS\P0379US\Reply to Non-Final Office Action dated 012804.doc